University of Alberta

Leadership and Manager Worklife, Burnout, and Job Satisfaction

by

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This work is dedicated to my parents,

TERRY and ANITA LEE,

for instilling in me the values of hard work,

commitment, and perseverance.

"Failure is not the worst thing in the world.

The very worst is not to try."

(Author Unknown)

Abstract

The leadership and guidance provided by managers is vital in promoting quality of patient care. Managers are subject to high stress and burnout in their demanding roles so addressing their worklife, level of burnout, and job satisfaction are important to retain strong leadership. A systematic review of the literature was conducted assessing the predictors of front line nurse manager job satisfaction finding that managers who were empowered, had organizational support, and autonomy in their role were more satisfied. A secondary analysis of data from 176 leaders in five different managerial cohorts was conducted as the second part of this study with findings suggesting that transformational leadership plays an important role in positively influencing the worklife and burnout of managers. The results indicate the importance of promoting the amount of control and autonomy that managers possess in their job in positively influencing worklife, burnout, and ultimately manager job satisfaction.

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CHAPTER 1:

INTRODUCTION

Statement and Importance of Problem

There is a growing body of research focused on the impact of leadership in nursing as strong leadership is a key component for the success of healthcare organizations. Most of these studies have focused on the effect of leadership on staff nurses, examining how leadership is linked to their worklife, level of burnout, job satisfaction, and retention. Although the focus of many healthcare organizations is to stem the shortage of staff nurses who are the providers of direct patient care, the impact of leadership is equally important to the managers who provide the vital link between senior leaders and staff nurses with the idea that developing and maintaining strong leadership will ultimately improve patient care and staff nurse retention. In this study, the predictors of front line nurse manager job satisfaction and the impact of transformational leadership on areas of worklife and burnout were examined.

The leadership and guidance provided by front line managers is invaluable in helping to promote quality nursing care and positive patient outcomes. Thus, job satisfaction is a key factor in retaining these managers because they are subject to high stress, burnout, and an increasing potential to leave amidst the forthcoming shortage of nursing leaders (Tourangeau, 2003). Identifying the predictors of job satisfaction will help front line managers, their supervisors, and organizations to develop strategies to implement, develop, and support nursing leadership to ensure that organizations can continue to provide quality patient care. Results of a systematic review on the predictors of job satisfaction for front line managers (Lee & Cummings, in review) found that span

of control, decentralization, and organizational support played a significant role in predicting job satisfaction of front line managers. Healthcare organizations are becoming increasingly larger and complex so a reduction in span of control and workload may improve the role effectiveness and satisfaction of front line managers. Managers who were empowered and had autonomy in their role were also more satisfied. Empowering and increasing organizational support for managers may be one way to positively influence aspects of worklife and reduce levels of burnout for managers in their demanding positions. One way to provide support for managers may be to examine the impact of leadership provided to managers by the directors they work for.

The transformational style of leadership is based on relational leadership and emotional intelligence where the focus is on taking care of the people rather than on the tasks (Kouzes and Posner, 2002). This style of leadership has been shown to be successful in nursing and in other fields such as business. Transformational leadership has the potential to create empowerment, support, and stronger collaboration for managers within and between disciplines with its five practices: *inspiring a shared vision*, *modeling the way*, *challenging the process*, *enabling others to act*, and *encouraging the heart*. Because leadership is practiced at many levels throughout an organization, strong leadership from senior directors could facilitate the development of effective leadership in front line managers and others at various hierarchical levels As leadership styles in hospitals have traditionally been based on a task oriented transactional style, a transformational style could have a positive impact on the worklife and level of burnout of front line nurse managers. Areas of worklife include the amount of workload, level of control, perceived fairness, congruence with values, appropriate rewards, and a perceived sense of community while burnout encompasses the exhaustion

aspect of burnout, perceived cynicism within the job, and actual performance level. Each of these factors has an impact on the job satisfaction of managers. If leadership is to be developed and maintained for the future, it is important for healthcare organizations to understand if a transformational leadership style can positively influence aspects of worklife and levels of burnout, thereby improving job satisfaction. The potential to keep nurse managers satisfied in their role will help with staff nurse retention as well as improve the quality of patient care.

Research Objectives

The purpose of this research study was to examine the predictors of front line nurse manager job satisfaction and understand the relationships between the dimensions of Kouzes and Posner's transformational leadership theory and the worklife and burnout of healthcare managers. In undertaking this study, five research objectives were identified as follows:

1. to understand the effect of each transformational leadership practice on manager worklife and level of burnout
2. to explore specific differences, if any, between leadership cohorts in their use of transformational leadership practices
3. to explore the differences, if any, between leadership cohorts in their rating of worklife and level of burnout
4. to understand and examine the predictors of front line nurse manager job satisfaction
5. to make recommendations for healthcare organizations to positively influence worklife, burnout, and job satisfaction of managers which may help improve manager retention and patient care

Significance of the Study

Leadership is a key factor that affects the worklife, level of burnout, and job satisfaction of managers. Because managers play a vital role in promoting the quality of patient care, dealing with the retention of staff nurses, and providing a link between staff nurses and senior leaders, it is important to ensure that they stay in their position amidst the forthcoming shortage of nursing leaders. By understanding how specific dimensions of transformational leadership affect the worklife and level of burnout of managers, organizations can develop strategies to help reduce the stress and challenges that these leaders face, ultimately keeping them satisfied with their jobs. This will help to enhance, develop, and maintain strong leadership for the future and help to improve the quality of care delivered to healthcare consumers.

Design and Methods

Study 1: Systematic Review of The Research Literature

A systematic review was conducted to examine the research literature that studied the determinants of front line nurse manager job satisfaction. Peer reviewed research studies from 1990 to the end of May 2006 that measured job satisfaction of front line nurse managers in all types of healthcare facilities were included.

Study 2: Secondary Data Analysis

A secondary data analysis was conducted using multiple regression and MANCOVA to examine the effect of Kouzes and Posner's transformational leadership theory on the worklife and level of burnout of managers. This study used the observer reported ratings of transformational leadership practices of directors to explore the impact of this leadership style on six areas of worklife and three aspects of burnout for managers and junior leaders in cancer treatment facilities across the Alberta Cancer Board. This

study compared the use of transformational leadership between leadership groups as well as examined differences in ratings of worklife and burnout for leaders in five manager cohorts.

Summary of Results

The systematic review found 14 total studies (12 quantitative, one qualitative, and one mixed methods) that investigated predictors of front line nurse manager job satisfaction. Most studies were published in the early 1990s and were conducted primarily in acute care settings. In total, 12 predictors of front line manager job satisfaction were reported in the final included group of studies. The determinants were grouped into five categories using content analysis: *organizational change, organizational support, job characteristics, the managerial role, and educational development*. The review findings provided evidence supporting a positive relationship between *support for managers, participative organizations, empowerment,* and nurse manager job satisfaction. These results suggest that examining managerial span of control and workload, as well as developing strategies to increase support, empowerment, and participation in decision making for front line managers may positively influence patient and staff outcomes.

The secondary analysis (multiple regression and MANCOVA) found that the two transformational leadership practices of *inspiring a shared vision* and *enabling others to act* by senior leaders did not significantly predict high levels of community, congruence with values, and cynicism in managers. Instead, the greatest impact on areas of worklife came from the practice of *enabling others to act*, *modeling the way*, and *encouraging the heart* on level of control, perceived fairness, and appropriate rewards for managers. The level of control and appropriate rewards were most important for managers and relate

strongly to their job satisfaction. The level of reported cynicism was the only aspect of burnout significantly related to leadership practices with findings suggesting that transformational leadership practices are more important for junior leaders in closer proximity to the staff nurse workforce. Other results of this study found that directors had the highest ratings of worklife and burnout levels likely because they have the most control over their role. Senior leaders also utilized more transformational practices than junior leaders. The results of this study suggest that transformational leadership practices by senior leaders play an important role in positively influencing the worklife and burnout levels of managers in particular by empowering managers to accomplish organizational goals and build a strong, supportive organizational culture.

Overview of the Thesis

The following chapter contains a systematic review discussing the predictors of front line nurse manager job satisfaction as the first paper of the thesis. In Chapter 3, research literature on transformational leadership, areas of worklife, and levels of burnout are discussed. In Chapter 4, methods for the secondary analysis are described. The context in which the study and data were collected and analyzed are discussed. The research findings are presented in Chapter 5. This chapter includes a discussion and analysis of the findings. In Chapter 6, the limitations of the study, implications and recommendations for healthcare organizations and for future research are discussed.

CHAPTER 2:

FACTORS AFFECTING JOB SATISFACTION OF FRONT LINE NURSE MANAGERS: A SYSTEMATIC REVIEW[1]

Background

Research has shown that nurses experience more psychological distress than the general population (Judkins et al. 2006) and often leave the field for less demanding careers (Collins 1996). Consequently, managers also play a vital role in dealing with the nursing shortage and helping to stem the loss of staff nurses (Shirey 2006). This contributes to the difficult role of the nurse manager as they attempt to maintain high quality standards of care, often within constrained resources. Front line managers are the vital link between senior management and staff nurses as providers of care. Leadership is critical to provide guidance for solving complex problems related to nursing care delivery (Smith et al. 2006). Nurse managers create structure, implement processes for nursing care, and facilitate positive outcomes (Anthony et al. 2005). The leadership and guidance provided by front line managers is invaluable in helping to promote quality nursing care and positive patient outcomes. Thus, job satisfaction is a key factor in retaining these front line managers.

Front line managers are subject to high stress and burnout, increasing the potential for managers to leave. In light of a forthcoming shortage of nursing leaders, this has strong implications for the retention and recruitment of nurse managers and sustaining leadership within healthcare settings (Tourangeau, 2003). Much of the nursing literature has focused solely on staff nurse job satisfaction with very limited research examining

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1 Factors Affecting Job Satisfaction of Front Line Nurse Managers: A Systematic Review (Lee and Cummings) is currently in review for publication.

factors that influence front line manager satisfaction. Therefore, it becomes important to understand the factors that influence front line nurse manager job satisfaction so that strategies can be implemented to retain and develop nursing managers.

The purpose of this study was to describe findings of a systematic review of studies that examined determinants of front line nurse manager job satisfaction in healthcare organizations and to make recommendations for further study.

Methods

Inclusion Criteria

Peer reviewed research studies, that measured job satisfaction of front line nurse managers in all types of healthcare facilities, were included. Front line nurse managers were defined as nurses in leadership roles responsible for managing a nursing unit or team, and having direct supervision of staff nurses in a healthcare organization. Therefore, these managers would be responsible for processes such as coordination and quality of patient care, managing staff schedules, payroll, performance reviews and decisions related to staff hiring and termination. This excluded studies that examined nurse leaders in roles that were not in direct supervision of staff nurses, such as clinical nurse educators. The second inclusion criterion was that the study must measure job satisfaction along with any determinants and predictors of job satisfaction. The third criterion was that studies must address the relationship between job satisfaction, front line nurse managers and the respective determinants. Quantitative and qualitative research designs including dissertations were included to provide a broader range of evidence for analysis.

Search Strategy and Data Sources

Electronic databases searched included ABI, Academic Search Premier, CINAHL, EMBASE, ERIC, HealthSTAR, Health Source Nursing, Medline, ProQuest Dissertations and Theses, PsychINFO, 15 years, 1990 to the end of May 2006 (see Table 1), with no restriction on study design or language. However, after implementation of the search strategy, no studies in languages other than English were found. Manual searches of specific journals such as *Canadian Journal of Nursing Leadership, Journal of Nursing Management, Journal of Nursing Administration,* and *Leadership Quarterly* were completed. Seven websites were searched for relevant research reports: Institute for Work & Health, www.iwh.on.ca/; Nursing Leadership Institute, www.fau.edu/nli/index.html; Sigma Theta Tau Honor Society of Nursing, www.nursingsociety.org/; Canadian Nursing Leadership Study, http://publish.uwo.ca/~hkl/national_leadership_study/index.htm; Canadian Health Services Research Foundation, www.chsrf.ca; Canadian Policy Research Network, www.cprn.org; and the American Association of Nurse Executives, www.aone.org. There were no results obtained from manual and website searches. Online and manual searches yielded a total of 1874 titles and abstracts once duplicates were removed.

Screening

The primary author reviewed 1,874 abstracts and titles using the three inclusion criteria and selected 48 abstracts and titles that included nursing manager job satisfaction. The second author separately evaluated a sample of 200 abstracts and titles using the inclusion criteria. Inter-rater reliability was 100%. Forty-eight titles and abstracts relevant to nurse manager job satisfaction were selected, and full study manuscripts were retrieved

Table 1

Literature Search: Electronic Databases

Database 1990-May, 2006	Search terms	Number
ABI Inform (limited to scholarly)	· nurse manager job satisfaction	43
Academic Search Premier (limited to scholarly)	nurse manager AND · job satisfaction (default fields)	26
CINAHL (limited to research)	nurse manager AND job satisfaction	151
	nurse administrator AND job satisfaction	212
EMBASE	nurse administrator, manager, nurse manager AND · job satisfaction (KW)	113
	administrative personnel AND · job satisfaction (KW)	74
ERIC	administrators, managers AND · job satisfaction (KW)	3
Health Source Nursing	nurse manager AND · job satisfaction (KW)	24
HealthStar	nurse administrators, managers or nursing, supervisory AND · job satisfaction	562
ProQuest Dissertations and Theses	Nurse manager AND · job satisfaction	64
PsycINFO	nurse manager	34
	nurse administrator	4
MedLine	nurse administrators, nurse manager, nursing supervisory AND · job satisfaction	564
Manual Search		0
Total Titles and Abstracts Reviewed (Duplicates Removed)		1874
First Selection of Studies		48
Second Selection of Studies		20
FINAL Included Studies		14

for screening. The primary author excluded twenty-eight studies using the inclusion criteria, leaving 20 studies for quality assessment and data extraction. Studies were excluded if they did not measure job satisfaction or if the role of the manager was not a front line position. Two qualitative studies were excluded as their focus did not specifically pertain to the subject matter (see Figure 1).

Quality Review

Each published quantitative article was reviewed twice for methodological quality by the first author using a quality rating tool adapted from an instrument used in three previously published systematic reviews (Cummings & Estabrooks 2003, Estabrooks et al. 2003, Wong & Cummings 2007). The adapted tool (see Figure 2) was used to assess four areas of each study: research design, sampling, measurement and statistical analysis. Thirteen items comprise the tool and a total of 14 possible points can be assigned. Twelve items were scored as 0 (=not met) or 1 (=met) and the item related to outcome measurement was scored as 2. Based on points assessed, each study fell in to one of three possible categories: strong (10-14), moderate (5-9) and weak (0-4). Four quantitative studies were removed after quality assessment leaving 14 studies in the final group: 12 quantitative, one mixed methods (Gould et al. 2001), and one qualitative study (Wong, 1998). The quantitative results of the mixed method study were not included due to low quality assessment rating of the quantitative design. Two experts in the leadership field were contacted to review the search strategy; one responded and confirmed that the search strategy was comprehensive. Appendixes A and B contain the quality assessment tool and definitions used in this systematic review.

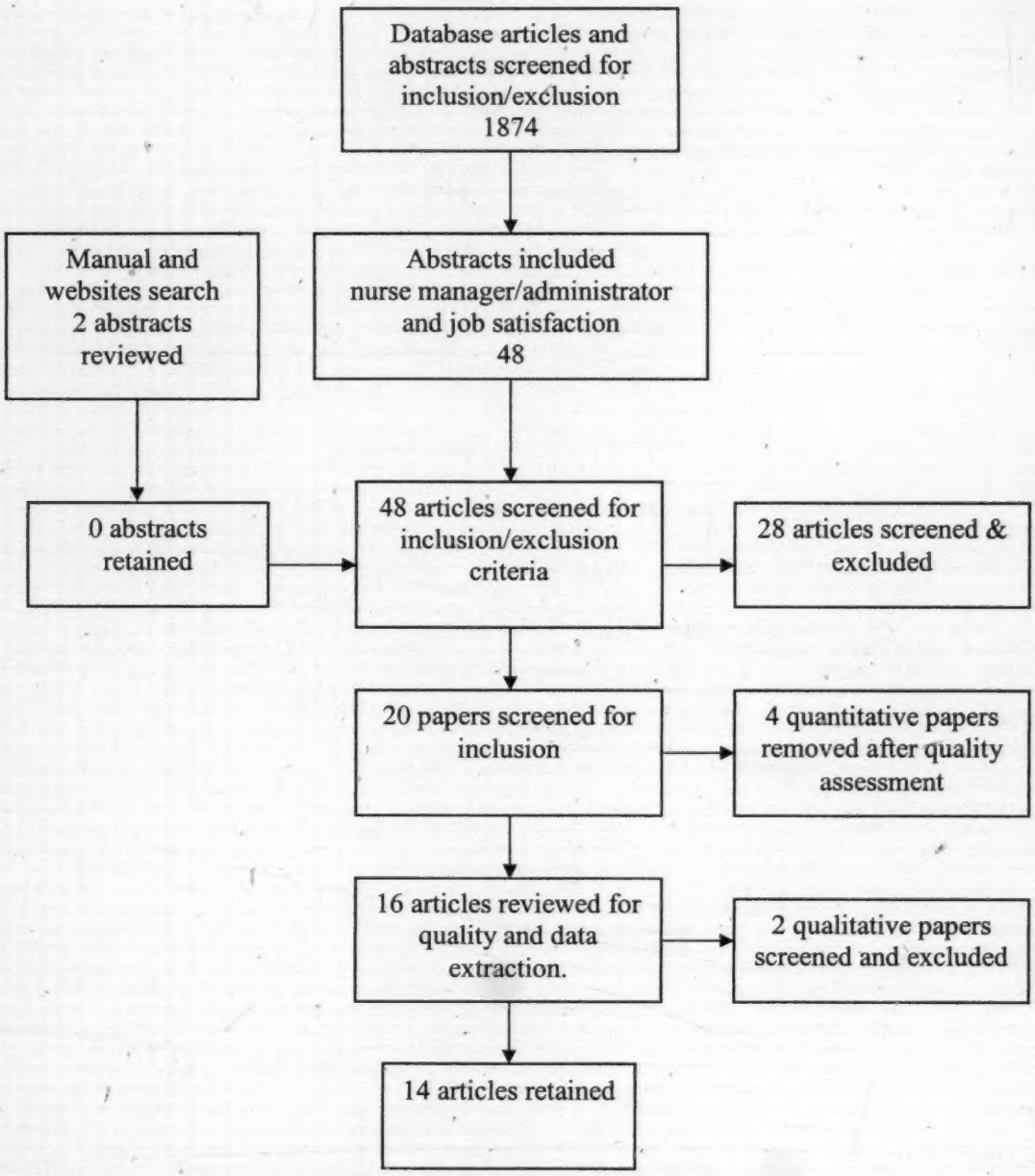
Database articles and abstracts screened for inclusion/exclusion 1874
Manual and websites search 2 abstracts reviewed
Abstracts included nurse manager/administrator and job satisfaction 48
0 abstracts retained
48 articles screened for inclusion/exclusion criteria
28 articles screened & excluded
20 papers screened for inclusion
4 quantitative papers removed after quality assessment
16 articles reviewed for quality and data extraction.
2 qualitative papers screened and excluded
14 articles retained

Figure 1. Abstract search and review process.

Job Satisfaction of First Line Nursing Managers:
A systematic review (2006)
Screening Tool for Inclusion/exclusion

Study:_____ First Author:
Publication Information: Date: _____ Journal:

Instructions for completion:
1. Circle Y or N for each criterion
2. Record inclusion decision: article must satisfy all 3 criteria
3. Record if additional references are to be retrieved

Inclusion/exclusion criteria:		
1. Does the sample consist of first line nursing managers?	YES	NO
Characteristics Specify:		
☐ At the level above staff nurses _____		
☐ Direct management of unit & staff _____		
☐ Other(specify) _____		
2. Does the study measure: Specify:	YES	NO
☐ Job Satisfaction _____		
☐ Determinants _____		
☐ Other(specify) _____		
3. Is the relationship between determinants and job satisfaction of first line managers identified?		
(a) Is there evidence of direction?	YES	NO
Text only: _____YES _____NO		
(b) Is there a P-value?	YES	NO
(c) Is there a statistic identified?	YES	NO
Which one(s)? _____		
(d) Is there an indication of magnitude?	YES	NO
4. **Final decision: include in study:**	YES	NO
Comments:		

Figure 2. Screening tool (adapted from Estabrooks, et al., 2003).

Data Extraction

Data extracted from the 12 quantitative studies were: author, journal, country, research purpose and questions, theoretical framework, design, setting, subjects, sampling method, measurement instruments, reliability and validity, analysis, job satisfaction measures, determinants measures and significant and non-significant results.

Results

Summary of Quality Review

In this review, all 12 quantitative studies were rated moderate or higher (scores ≥ 5) and were retained. See Table 2 for a summary of strengths and weaknesses of quantitative studies. Eleven studies collected data from multiple sites allowing for larger sample sizes and greater heterogeneity in the resulting samples. The one study from a single hospital site was also the lone retrospective study about the evaluation of a charge nurse program (Krugman & Smith 2003). Instrument reliability of the determinants was reported in seven studies and validity in eight studies. Ten studies reported using valid measures of job satisfaction. Acceptable levels of reliability for job satisfaction (alpha coefficients ≥.70) were achieved in eight of the 12 quantitative studies.

The most common weaknesses in the 12 quantitative studies were sampling, use of a theoretical framework, and analysis procedures. All studies utilized non-experimental, cross-sectional or exploratory designs that limit interpretations of causality. Eleven of the 12 quantitative studies were prospective in design as data requirements were developed in advance and collected concurrently. Only four studies utilized a theoretical framework to guide their research. The frameworks were based on empowerment, power, organizational support, and organizational structure, each of which

Table 2

Summary of Quality Assessment: 12 Included Quantitative Papers

Criteria	No. of studies	
	YES	NO
Design:		
Prospective studies	11	1
Used probability sampling	3	9
Sample:		
Appropriate/justified sample size	1	11
Sample drawn from more than one site	11	1
Anonymity protected	5	7
Response rate >60%	9	3
Measurement:		
Reliable measure of determinant	7	5
Valid measure of determinant	8	4
Valid measure of job satisfaction	10	2
* Job satisfaction internal consistency ≥ 70	8	4
Theoretical model/framework used	4	8
Statistical Analyses:		
Correlations analyzed when multiple effects studied	9	3
Management of outliers addressed	0	12

*This item scored 2 points. All others scored 1 point.

has large bodies of research in other fields such as business. While many possible factors could influence job satisfaction, this review found only a small number of studies for the predictors indicating that there may be little theoretical background for these studies. Most studies used correlations with only two utilizing a higher level of statistical analysis with Hierarchical Linear Modeling (HLM). Three studies used random sampling with the

rest reporting convenience sampling. Only one study (Kinsella O'Neil 1991) justified sample size based on a power calculation. Another study (Hurley 2005) used a sample of only female nurse managers. Failure to address the management of outliers was noted in all 12 quantitative studies. Several topics, such as *justification of sample size* and *outliers*, may have been addressed in the research study, but were not reported in the print article. Five studies, mostly dissertations, reported protection of anonymity.

Search Results

The final set of included quantitative studies and their characteristics is presented in Table 3, including the qualitative characteristics of the mixed method and qualitative studies. Of the 14 studies published between 1990 and 2006, nine were conducted in the United States, three in Canada, one in Hong Kong, and one in the United Kingdom. The 12 quantitative studies investigated the relationship between various determinants and job satisfaction in acute care inpatient units of hospitals (11 studies) and long-term care inpatient units (one study). Qualitative findings from the mixed method and qualitative study were generally consistent with quantitative findings. No studies were found that explored job satisfaction of front line managers in community or public health settings.

Measures of Job Satisfaction

Nine different instruments were used to measure front line nurse managers' job satisfaction in the 12 quantitative studies. Six studies each used a different instrument. The remaining six used three different instruments with two using the Revised Job Descriptive Index (JDI), two using the Pressure Management Indicator (PMI) satisfaction subscale, and another two using the McCloskey-Mueller Job Satisfaction Scale (MMJS). The qualitative study and the qualitative portion of the mixed methods study both used

Table 3

Characteristics of Included Studies

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Quantitative Studies:						
Acorn et al. (1997) *Nursing Research* Canada	O: Testing of a theoretical model of decentralization	200 first line nurse managers, 41 acute care hospitals	Decentralization: Index of Centralization – 2 scales (Hage & Aiken, 1967)	α=.85 - .95 and α=.70 - .96 for each scale	Not reported	Path Analysis Descriptive Statistics
			Job Satisfaction: McCloskey/Mueller Satisfaction Scale – 31 item (Mueller & McCloskey, 1990)	α=.52 - .80		
Boeglin M. J. (1996) *Unpublished dissertation* USA	O: Determining factors that affect first-line nurse manager job satisfaction	98 first level nurse managers, 7 hospitals non-government, minimum of 200 beds each	Demographic and structural changes questionnaire created by author - Span of control - Education, Tenure, Experience - Changes in communication channels	Not reported – stated as approved by committee	Not reported – stated as approved by committee	Pearson's product moment correlations
			Job Satisfaction: Revised Job Descriptive Index (JDI) from (Smith et al., 1987)	α=.80 - .88	r=.88 (Balzer et al., 1990)	
			Job In General (JIG) from (Ironson et al., 1989)	α=.91	r=.66 to .80 Convergent (Balzer et al.)	

(table continues)

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Bunsey et al. (1991) *Applied Nursing Research* USA	O: Assess relationship among job satisfaction and role expectations	72 first line nurse managers, 11 community hospitals	Role Conflict-Role Ambiguity – 2 scales (Rizzo et al., 1970)	α=.66 - .78	Not reported	Correlations Multiple Regression
			Job Satisfaction: Work Satisfaction Scale (Atwood & Hinshaw, 1984)	α=.87	Not reported	
Burns M. (1992) *Unpublished dissertation* USA	O: Determine the relationship between types & sources of perceived social support and head nurse stress, job satisfaction	124 head nurses, 14 general & acute care hospitals	Social Support – Norbeck's Social Support Questionnaire (Norbeck et al. 1981).	α=.85 - .92	r=.35 - .41 Concurrent (Norbeck et al., 1983)	Pearson's product moment correlations
			Caplan's "People Around Us" (Caplan et al, 1980).	α=.92	r=.41 Concurrent (Jennings, 1987)	
			Job Satisfaction – Index of Work Satisfaction -44 items (Stamps et al, 1978)	α=.91	Established by factor analysis	
Dahlen R. (2002) *Unpublished dissertation* USA	O: Examine job satisfaction of each managerial group	One sample of 32 low-level nurse managers and one sample of 10 nurse executives, 2 hospitals	Job Satisfaction – Job Descriptive Index – 90 items (Smith et al, 1969)	α=.86 - .92	Discriminant and convergent validity established	t-tests

(table continues)

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Hurley M. (2005). *Visions* USA	F: Martha Rogers theory: the Science of Unitary Human Beings	124 female first line managers, 34 states	Power – The Knowing Participation in Change Test (PKPCT, V2) – 4 concepts (Barrett, 1983)	α=.63 - .99	r=.56 to .70 Construct by factor analysis	Pearson product moment correlations
			Job satisfaction: Work Quality Index (WQI) – 38 items (Whitley & Putzier, 1994)	α=.72 - .94	Established by factor analysis	t-tests, ANOVA, chi square
Kinsella O'Neil E. (1991) *Unpublished dissertation* USA	O: Describe the relationships between organizational structure, professional autonomy, and job satisfaction.	132 first line nurse managers from medical & surgical units, 9 voluntary metro hospitals	Organization – Profile of Organizational Characteristics – 16 items (Likert, 1976)	α=.90 - .96	Established from past research	Correlations and Multiple regression analysis
			Autonomy – Autonomy for Employing Organization Scale – 11 items (Forsyth & Danisiewicz, 1985)	α=.68	Divergent validity established from correlations	
			Job Satisfaction – Minnesota Satisfaction Questionnaire Short Form - (MSQ-S) – 20 items (Weiss, Davis, England, & Lofquist, 1967)	α=.84 - .91	Validity established from correlations	

(table continues)

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Krugman M. & Smith V. (2003) *Journal of Nursing Administration* USA	O: To describe the development and evaluation of a permanent charge nurse role and report outcomes of this leadership model over 4 years	104 permanent charge nurses, University of Colorado Hospital, 4 year period from 1999	Job Satisfaction – McCloskey-Mueller Satisfaction Scale (Mueller & McCloskey, 1990) - 31 items	α=.89	Not reported	t-tests ANOVA
Laschinger et al. (2004). *Nursing Leadership* Canada	F: Kanter's theory of organizational empowerment	202 first line nurse managers in acute care hospitals	Structural empowerment – Conditions of Work Effectiveness Questionnaire-II (CWEQ-II), 19 items (Chandler, 1986)	α=.79 - .82	r=.56	Correlations Hierarchical multiple regression
			Psychological Empowerment – 12 items, (Spreitzer, 1995)	α=.87 - .92	r=.62-.72 from previous studies	
			Job Satisfaction: Pressure Management Indicator (PMI) – job satisfaction subscale (Williams & Cooper, 1998)	α=.88	Concurrent validity established	

(table continues)

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Laschinger et al. (2006). *Nursing Economic$* Canada	F: Perceptions of Organizational Support (POS) by Eisenberger	202 First line nursing managers in acute care hospitals	Perceived Organizational support – Survey of Perceived Organizational Support, 12 items (Eisenberger et al., 1986)	α=.91	Not reported	Descriptive Statistics Pearson Correlations
			Job Satisfaction: Pressure Management Indicator (PMI) – 6 items (Williams & Cooper, 1998)	α=.86	Not reported	
Ringerman E. S. (1990). *Western Journal of Nursing Research* USA	O: Determine if decentralization is related to job satisfaction, organizational commitment, and professional practice climate..	292 first line nurse managers in state hospitals	Decentralization: Hage & Aiken Index of Centralization, 9 questions (Hage & Aiken, 1967)	Not reported	Not reported	Pearson correlations ANOVA, t-tests
			Job Satisfaction: Munson-Heda Job Satisfaction Questionnaire, 4 scales, 13 items (Munson & Heda, 1974)	Not reported	Not reported	Hierarchical, stepwise, and multiple regression
Wells G. T. (1990). *Nursing Administration Quarterly* USA	O: Determining the relationship between decentralization of nursing service and nurse manager job satisfaction	95 first line nurse managers, 8 acute care hospitals	Centralization or decentralization from Demographic Data Profile, 6 items	Not reported	Not reported	Two-way ANOVA
			Job Satisfaction: Staff Satisfaction Scale– 38 Item Likert scale (Slavitt et al., 1978)	α=.91	Tested from previous studies	

(table continues)

Author(s)/ journal	Framework (F) or objective (O)	Subjects	Measurement/instrument	Reliability	Validity	Analysis
Mixed Method and Qualitative Characteristics:						
Gould et al. (2001). *Journal of Advanced Nursing* United Kingdom	O: Identify the continuous professional development needs of clinical nurse managers	9 clinical managers in charge nurse roles from 4 acute hospitals	Interviews to examine the role of the clinical nurse manager - Used to create quantitative survey questionnaire	N/A	Identification of recurrent themes	Content analysis
Wong F. K. Y. (1998). *Journal of Nursing Management* Hong Kong	O: Examine the main features and dynamics of work of nurse managers	6 ward managers from 1 acute care hospital	Interviews to explore the work involvement of managers and related dynamics	N/A	Not reported	Thematic analysis followed by extended case method

interviews to collect information on front line nurse manager job satisfaction. Both of these studies used content analysis to generate findings on job satisfaction.

Study Results: Determinants of Job Satisfaction

In total, 12 predictors of front line manager job satisfaction were reported in the final included group of studies. The determinants were grouped into five categories using content analysis: *organizational change, organizational support, job characteristics, the managerial role, and educational development*. See Table 4 for categories and outcomes.

Study Results: Organizational Change

Four studies examined the influence of various organizational changes on nurse manager job satisfaction. Three studies examined *decentralization* as a predictor with decentralization occurring prior to and during the restructuring of healthcare organizations in the 1990s. Two studies reported that decentralization was related to increased job satisfaction. One study also found that decentralization correlated with organizational commitment and a professional practice climate in addition to job satisfaction (Ringerman 1990). The remaining study indicated that decentralization did not significantly effect job satisfaction (Wells 1990).

Two determinants of nurse manager job satisfaction focused on specific outcomes arising from decentralization: *changes in communication channels* and *changes in the number of employees supervised*. Non-significant influences on job satisfaction were reported following changes to formal communication channels, which may be due to the small number of respondents reporting a change in communication channels (Boeglin 1996). Finally, managers who experienced any type of change (increase or decrease) in the number of employees supervised had lower work satisfaction than managers not

Table 4

Determinants of Nurse Manager Job Satisfaction

Factors Affecting Job Satisfaction	Source	Significant Findings	Comment
Organizational Change:			
Decentralization	Wells (1990)	NS	Decentralized vs. centralized settings
	Ringerman (1990)	+	Increased decentralization
	Acorn (1997)	+	Increased decentralization
Change in # of employees	Boeglin (1996)	–	Any increase or decrease in number of employees supervised
Change in formal communication	Boeglin (1996)	NS	Any change in communication levels between employee and supervisor
Organizational Support:			
Support	Laschinger (2006)	+	Perceptions of support
	Burns (1992)	+	Support from supervisor
Participative organization	Kinsella (1991)	+	Participative organizations
Job Characteristics:			
Power	Hurley (2005)	+	Managerial Power
Empowerment	Laschinger (2004)	+	Empowerment
Autonomy	Kinsella (1991)	NS	Professional autonomy

(table continues)

Factors Affecting Job Satisfaction	Source	Significant Findings	Comment
Managerial Role:			
Being a manager	Dahlen (2002)	+	Those in nurse manager role had higher satisfaction than executives
	Krugman (2003)	+	Those in a charge nurse role had higher satisfaction than staff nurses
	Wong (1998)	+	Managers have more power, autonomy and satisfaction than staff nurses
Disagreement with manager time use	Bunsey (1991)	–	
Educational Development:			
Education of manager	Boeglin (1996)	NS	
Job training	Gould (2001)	+	

experiencing a change in supervision (Boeglin 1996). However, little discussion was provided. Results in this category were equivocal with both significant and non-significant relationships between decentralization, specific outcomes of decentralization, and job satisfaction.

Study Results: Organizational Support

Support was examined as a determinant in two studies and found to be positively and significantly related to nurse manager job satisfaction. Managers that either had or perceived that they had organizational and social support from their supervisors had higher levels of job satisfaction (Burns 1992, Laschinger et al. 2006). The last study in this category examined *being in a participative organization* as a determinant, finding

that managers who were able to participate in organizational processes reported increased job satisfaction (Kinsella O'Neil 1991). The important role that organizational support of front line managers plays in improving their job satisfaction is evident from the findings in this category (3 studies).

Study Results: Job Characteristics

Three job characteristics (*empowerment*, *power*, and *job autonomy*) were examined in relation to nurse manager job satisfaction. One study found that managers who were empowered, both structurally and psychologically, and had the resources to do their job, reported significantly higher job satisfaction (Laschinger et al. 2004). Power was also found in one study to be significantly related to job satisfaction. Managers who reported that they had power in their position to implement change had higher satisfaction (Hurley 2005). However, professional autonomy had no significant relationship to job satisfaction, which is contrary to Kinsella O'Neil's (1991) research hypothesis.

Study Results: The Managerial Role

Two determinants, *being in the front line manager role* as compared to being in another organizational position and *agreement with the manager's use of time*, were found in three studies to have significant positive relationships to front line manager job satisfaction. Front line nurse managers had significantly higher overall job satisfaction than staff nurses in one quantitative study (Krugman & Smith 2003) supported by qualitative results (Wong 1998). Front line managers also had higher job satisfaction than nurse executives (Dahlen 2002). These three studies suggested that being a front line manager, rather than another organizational role, led to higher job satisfaction. The last

study found that when supervisors and physicians disagreed with the manager's use of time, the manager reported decreased job satisfaction (Bunsey et al. 1991).

Study Results: Educational Development

Findings in this category were inconclusive with both significant and non-significant results reported by two studies. One study found no significant relationship between educational preparation and job satisfaction (Boeglin 1996). As no other comparable data in the literature review from that study was available, the author suggested further research to explore the idea. The second study was a mixed methods study with qualitative results suggesting that when managers had opportunities for educational development and job training, they were more satisfied (Gould et al. 2001).

Discussion

This study reviewed research examining predictors of front line nurse manager job satisfaction. While there are many studies focusing on job satisfaction of staff nurses, less research has explored the nature of job satisfaction for front line nurse managers. A total of 14 studies (12 quantitative, one mixed method, and one qualitative) including four unpublished dissertations reflect the small group of studies that advance our understanding of front line nurse manager job satisfaction. Given that many factors could affect job satisfaction, such as workload, organizational climate, productivity, or values (Ivancevich et al. 2005, pp. 86-88, pp. 177-178), our findings represent only a small number of factors that influence job satisfaction and indicates that this topic needs further research.

Predictors of Front Line Manager Job Satisfaction

Five categories of determinants, *organizational change, organizational support, job characteristics, the managerial role, and educational development,* arose from the

results of this review. Research indicated that organizational changes had varying effects on job satisfaction. Decentralization into flatter organizational structures where front line managers had expanded roles increased job satisfaction as managers reported more freedom in decision making, increased opportunities for responsibility, and more challenge in their work (Ringerman 1990, Acorn et al. 1997). A key difference between decentralization and centralization is the task of budget preparation (Wells 1990). Decentralized systems allow managers to plan budget activities at the unit level while centralized settings may compensate for not including budget activities with other autonomous management duties. This may explain the non-significant result between decentralization and job satisfaction (Wells 1990). As the studies on decentralization took place during the 1990s, their results may no longer be applicable to the current healthcare system.

Decentralization and restructuring often involve changes in span of control and organizational structure. Research on front line manager span of control found no relationship between span of control and staff nurse job satisfaction. However, transformational and transactional leadership styles were found to have positive effects on nurse satisfaction (Doran et al. 2004). While this finding focused on staff nurse satisfaction, it has implications for how the leadership style and span of control of senior leaders can affect the satisfaction of front line managers. Laschinger and Wong (2007) found that overall in Canada, front-line managers have very large spans of control. With the increasing complexity and size of healthcare organizations, more than 50% were considering a decrease in span of control to improve role effectiveness of managers (Laschinger & Wong 2007). Thus, healthcare organizations may be able to improve

manager job satisfaction and effectiveness by examining organizational structure and span of control.

It is clear that organizational support for managers by their supervisors is a key factor that affects job satisfaction. Managers who are able to participate and have input in decision making report increased connectedness to other levels of management as well as to the staff nurses that they manage (Kinsella O'Neil 1991). Bunsey et al. (1991) identified the importance of supervisors supporting a manager's autonomous use of time and suggested that support should translate to other aspects of managerial activities as well. The concept of support in these studies involves providing emotional support and allowing the front line manager to be heard. What is not clear from this research, are other forms of support that managers find valuable, such as the provision of educational development for managers. The qualitative study suggested that providing training opportunities and educational development led to improved job satisfaction (Gould et al. 2001). This suggests that developing strategies to increase support in a variety of areas could improve job satisfaction.

Empowerment and power, as nurse manager job characteristics, have close ties to organizational support. *Structural empowerment* indicates that a manager has the resources to meet the needs of the unit and staff, while *psychological empowerment* refers to the manager having congruence with the values and direction of the healthcare organization (Laschinger et al. 2004). *Power* is related to the manager having the ability to make changes in their work environment (Hurley 2005). Providing support and resources to managers can help to create empowerment and allow managers to use their power to positively influence unit, staff and patient outcomes. One study found no significant relationship between autonomy and job satisfaction, suggesting theoretical or

methodological errors as findings were contrary to the researcher's expected hypothesis (Kinsella O'Neil 1991). That study used the Likert theory of participative organizations which may not apply to the hospital setting as the theory originated out of free market management of industrial organizations (Kinsella O'Neil 1991). As managers experienced increased autonomy and freedom in decision making as a result of decentralization (Ringerman 1990, Acorn et al. 1997), the concept of autonomy for managers may require further study. Laschinger and Wong (2007) found that middle manager's perceptions of organizational support were significantly related to front line manager empowerment, job and role satisfaction, and a supportive practice environment. Thus, when front line managers felt empowered and supported, their perceptions of support carry through to higher management levels as well which has implications for their job satisfaction.

Greater job satisfaction of front line managers, when compared to staff nurses and nurse executives, is of interest as executives were expected to have higher job satisfaction in Dahlen's (2002) research hypothesis. While there may have been a statistically significant difference between executive and front line managers, practically, the two groups may vary little (Dahlen 2002). Little research has been conducted on the differences between leadership and job satisfaction among various managerial levels within an organization (Gresham & Brown 1997, Dahlen 2002). Similarly, little is known about why charge nurses have higher job satisfaction than staff nurses. Krugman and Smith (2003) noted that significant changes were taking place within the nurse executive team and staff nurse salaries during the time of their study which could have affected the results. Compared to staff nurses, managers had more autonomy and power in their role which may have contributed to increased job satisfaction (Wong 1998). The differences

between front line managers, executives, and staff nurses serve to highlight that job satisfaction is different within each organizational level and that the interactions between hierarchical levels may also influence job satisfaction. Further research to understand the differences in job satisfaction between the various organizational levels may help healthcare groups to specifically target key determinants that promote manager and staff nurse job satisfaction.

Quality Review, Design and Analysis

All 12 quantitative studies were rated moderate or higher suggest that the research designs were of sufficient quality to validly aggregate results. The majority of studies reported sufficient instrument reliability and validity which strengthens the quality and credibility of findings. All but one study from this review collected data from multiple sites increasing generalizability of findings by examining predictors of satisfaction in a variety of settings. Studying job satisfaction in multiple sites should be continued in future research. Findings are most generalizable to acute care settings as most studies were conducted in acute care hospitals. Research in other settings should be conducted to determine if other findings are specific to the front line managers' context or setting.

Random sampling was notably lacking in reviewed studies with most using convenience sampling. However, randomization is challenging when targeting a particular sample group like front line managers. While lack of random sampling reduces the strength of the study design, the results remain relevant to the front line manager population. Probability sampling can still be used within the manager population to strengthen study designs. While the majority of studies used correlation and regression, there is opportunity to use more robust methods of analysis like SEM to test more complex theoretical models of predictors and outcomes of job satisfaction.

Theoretical Framework

Most studies were not guided by a theoretical framework, which is of concern as theory provides a basis from which relationships between ideas and variables can be constructed and empirically tested. The main reason for a lack of a theoretical framework may be due to the small number of studies examining the determinants of nurse manager job satisfaction. While it is promising to see frameworks being built around themes of decentralization, empowerment and power, relationships between job satisfaction and other determinants should be explored to provide a broader view of job satisfaction. A large body of management research exists from areas outside of healthcare (Kinsella O'Neil 1991). Thus, some of the applicable concepts and theories could be studied in healthcare settings as well. Just as transformational leadership theory has been found effective in both the business (Lim 1997) and healthcare arenas (Bowles & Bowles 2000, Krugman & Smith 2003, Cardin & McNeese-Smith 2005), it would be valuable to examine whether, and how, theoretical approaches to job satisfaction of business managers translate to healthcare.

Measurement of Job Satisfaction

Nine different instruments were used to measure job satisfaction of nurse managers in the 12 quantitative studies. Most studies had similar definitions of job satisfaction, generally defined as a feeling, experience and expectation of what a job should be, based on personal and work related factors. However, one study defined job satisfaction as the attainment of needs according to Maslow's hierarchy (Kinsella O'Neil 1991). Because job satisfaction was not defined in all studies, each researcher may have a slightly different interpretation or conceptualization of job satisfaction. Also, as job satisfaction has been studied in business and industry, a wide range of measurement tools

are available. Job satisfaction was measured as the dependent variable based on personal and work related factors identified from the instrument chosen by each researcher. Tourangeau et al. (2006) used confirmatory factor analysis to investigate the reliability of the McCloskey-Mueller Job Satisfaction scale, the measurement tool for two studies in this review. They found seven rather than eight factor loadings and one scale consisting of low reliabilities, which raises questions about the validity of the MMJS scale. This may also suggest that over time, the meaning of job satisfaction may have evolved while the scale did not (Tourangeau et al. 2006). As the MMJS scale was created prior to the 1990s, it is likely that major events like healthcare restructuring and decentralization have influenced how healthcare workers conceptualize job satisfaction. A systematic review measuring the reliability and validity of job satisfaction instruments found only seven of 29 tools reported high reliability and validity (Van Saane et al. 2003). That review found 11 domains of job satisfaction but did not provide a succinct definition based on a lack of standardized factors to be considered when measuring job satisfaction. Another systematic review of job satisfaction focused on staff nurse satisfaction highlighting 13 key variables linked to job satisfaction; however, also did not provide a clear conceptualization of job satisfaction itself (Blegen 1993). The 13 variables ranged from personal attributes to organizational features and job attitudes. These reviews and the findings of our study suggest a lack of consensus on what job satisfaction means generally and specifically for front line nurse managers. This is a fruitful area for further research.

Implications of This Review

Examining the predictors of nurse manager job satisfaction is important because organizations need to understand how to retain and develop nursing leadership for the

future. Front line managers are the vital link between senior leaders and staff nurses and play a strong role in dealing with the retention of staff nurses and in promoting quality patient care. With the forthcoming shortage of nursing leaders (Tourangeau 2003), it becomes even more important for organizations to sustain viable nursing leadership. Identifying the predictors of job satisfaction will help front line managers, their supervisors, and organizations to develop strategies to implement, develop, and support nursing leadership to ensure that organizations can continue to provide quality patient care.

Based on our synthesis of findings, we provide several recommendations for ongoing research in this area. First, both span of control and nurse manager workload need to be addressed in order to improve manager job satisfaction. Healthcare organizations are becoming increasingly larger and complex so a reduction in span of control and workload may also improve the role effectiveness of front line managers in addition to improving job satisfaction.

Second, studies suggest that an increase in organizational support for managers will improve job satisfaction. Increased support may empower managers to carry out and direct work more effectively. Developing strategies to increase organizational support and empower managers to participate actively in decision making may increase job satisfaction of higher-level managers in addition to front line managers, ultimately increasing manager retention.

Third, it is evident that the level of job satisfaction of front line managers is different from that of nurse executives and staff nurses. Further research should examine the factors that affect job satisfaction on different managerial and organizational levels. The factors that satisfy managers of one level may be different from that of managers in

another level. By understanding the organizational dynamics between hierarchical levels, healthcare organizations can develop specific strategies that support and retain leaders within various managerial levels.

Fourth, more current research on the determinants of front line manager job satisfaction is needed. With eight of the 14 included studies being conducted during the 1990s, it is important to examine whether those study results are still valid in the current healthcare system. Research to identify and investigate linkages among determinants of job satisfaction for nurse managers should also be undertaken. Further qualitative inquiry could add greater depth and clarity to the current conceptualization of nurse manager job satisfaction in today's healthcare system and for the newer generation of healthcare managers.

The review was limited by a potential reporting bias as published studies tend to over report positive and significant findings. The variability in conceptualization and measurement of job satisfaction may also limit the validity and generalizability of findings.

Conclusions

This review found 14 studies that investigated predictors of front line nurse manager job satisfaction. Most studies were published in the early 1990s and were conducted primarily in acute care settings. The review findings provide evidence supporting a positive relationship between *support for managers, participative organizations, empowerment,* and nurse manager job satisfaction. These results suggest that examining managerial span of control and workload, as well as developing strategies to increase support and empowerment of front line managers is pivotal to positively influence patient and staff outcomes. Such strategies may improve the satisfaction of

front line managers in order to recruit and sustain viable nursing leadership within the healthcare system for the future.

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APPENDIX A:

QUALITY ASSESSMENT TOOL

The Determinants of Nurse Manager Job Satisfaction: A systematic review (2006) Quality Assessment and Validity Tool for Correlational studies		
Study:_____ First Author: Publication Information: Date: Journal:		
Design:	**NO**	**YES**
1. Was the study prospective?	0	1
2. Was probability sampling used?	0	1
Sample:		
1. Was sample size justified?	0	1
2. Was sample drawn from more than one site?	0	1
3. Was anonymity protected?	0	1
4. Response rate more than 60%	0	1
Measurement:		
■ **Determinants (IV) [assess for IVs correlated with DVs only]**	0	1
1. Was the determinant measured reliably?	0	1
2. Was the determinant measured using a valid instrument?		
■ **Influence on the measure of JOB SATISFACTION (DV)**	0	1
1. Was the dependent variable measured using a valid instrument?	0	2
2. If a scale was used for measuring the dependent variable, was internal consistency $\geq .70$?	0	1
3. Was a theoretical model/framework used for guidance?		
Statistical Analysis:		
1. If multiple determinants were studied, are correlations analyzed?	0	1
2. Were outliers managed?	0	1
Overall Study Validity Rating (circle one) (key: 0-4=LO; 5-9=MED; 10-14=HI)	**TOTAL: _____** **LO MED HI**	

APPENDIX B:

DEFINITIONS

DESIGN

1. **Was the study prospective?**
   Most studies are probably retrospective but prospective studies would be preferable.

2. **Was probability sampling used?**
   A random sample of some form or a systematic sample with a random start is acceptable. Most researchers probably used a convenience sample, i.e., studying all the patients available to them in one or more setting(s) that agreed to participate which is scored zero.

SAMPLE

1. **Was sample size justified?**
   Sample size is justified if it is based on appropriate power calculations (power=80), or follows other rules of thumb such as an N of at least 10 per IV studied. Even if researchers try to justify lower standards, a zero is cored if these cut-offs are not met. This assessment is a judgment based on available information. Two rules of thumb will apply:
   - If using a multivariate approach 10 cases per IV are required
   - If using several correlations or t-tests, a sample of 80 or more reflects adequate power

   Sample sizes that suggest very high power, e.g., because it is so large, will also be noted.

2. **Was sample drawn from more than one site?**
   This refers to physical location – multiple groups belonging to the same system count as multi-site. Several units within the same hospital do not count as multi-site, but several hospitals within the same system or region do. Samples drawn from more than one site score a 1.

3. **Was anonymity protected?**
   If researcher studied nursing managers in is/her own facility, the researcher may be able to determine the identity of responders. Subjects who think their responses are identifiable tend to give more politically correct or socially desirable responses. A 1 is scored if anonymity is protected.

4. **Response rate more than 60%?**
   Operationally defined as the number of people who participated divided by the number of people who were sampled (e.g., given or sent or offered a questionnaire). If not reported, information that allows calculation will be sought and the same rule applied.

MEASUREMENT

Determinants (IV) [assess for IVs correlated with DV only]

1. **Are determinants which affect job satisfaction measured reliably according to one of the following categories?**
   - Organizational factors like organizational support, hospital policy
   - Unit factors like staff issues, unit budget
   - Personal factors like level of job stress

2. **Are determinants measured using a valid instrument?**
   Did researchers make the link between the extent of the determinants and their effects? If so, 1 is scored. A zero is scored if there is no indication of validity for measurement of the determinants.

Influence on the measure of Job Satisfaction (DV)

1. **Is the dependent variable measured using a valid instrument?**
   Did researchers measure job satisfaction using a valid instrument? If so, 1 is scored. A zero is scored if there is no information indicating the quality and validity of the instrument.

2. **If a scale was used for outcomes, is internal consistency $\geq .70$?**
   The internal consistency for scales measure job satisfaction need to be $> .70$ as an indicator for reliability of the measurement tool in order to score a 2. A zero is score if there is no information.

3. **Was a theoretical model/framework used for guidance?**
   The researcher needs to indicate a framework used in the study in order to score a 1. A zero is scored for no information or no framework.

STATISTICAL ANALYSIS

1. **If multiple determinants studied, are correlations analyzed?**
   If more than one determinant for job satisfaction was studied, study scored zero if results reported using numerous bivariate statistics (e.g.., reports multiple t's, r's, etc.) only. 1 is scored if there was an attempt to explore relationships among determinants, i.e., correlations are reported, multiple regression is used, or interactions are reported (the discussion noted that specific predictors were or were not highly correlated with each other.)

2. **Are outliers managed?**
   If not, relationship could be spurious. If one of the following was reported to decrease the disproportionate effect of outliers, I is scored:
   - Outliers removed,
   - A technique used to moderate their effect (e.g.., winsorizing, jack-knifing), or
   - Non-parametric statistics used (Spearman's rho or MWU, etc.)

   Omitting any discussion of outliers or mentioning-but-not-managing was scored as a zero.

CHAPTER 3:

TESTING KOUZES AND POSNER'S LEADERSHIP THEORY ON MANAGER WORKLIFE AND BURNOUT

Strong leadership is a key component of the success of healthcare organizations. Nurse managers provide a link between senior leaders and staff nurses and have an impact on the quality of patient care provided. For organizations to sustain strong leadership, factors such as burnout and aspects of worklife need to be addressed to ensure that managers are satisfied in their positions. The use of different styles of leadership, such as transformational practices, may help to positively influence manager worklife and burnout and promote job satisfaction and the retention of nursing leaders.

Background

Research has shown that nurses experience more psychological distress than the general population do (Judkins, Massey, & Huff, 2006). This contributes to challenges in the nurse manager role because managers are responsible for maintaining high-quality standards of patient care, often within constrained resources. Nursing leadership is critical to provide guidance in solving complex problems related to nursing care delivery (Smith, Manfredi, Hagos, Drummond-Huth, & Moore, 2006). Nurse managers create structure, implement processes for nursing care, and facilitate positive outcomes (Anthony et al., 2005). Managers' leadership and guidance are invaluable to promote quality nursing care and positive patient outcomes.

The stress of the nursing profession causes staff nurses to leave the field for less demanding careers (Collins, 1996). Consequently, managers play a vital role in dealing with the nursing shortage by helping to stem the loss of staff nurses (Shirey, 2006).

Because nurse managers are also subject to high stress and burnout (Laschinger, Almost, Purdy, & Kim, 2004), there is greater potential for them to leave, which reduces the healthcare organization's leadership capacity at the level of patient care service delivery. Thus, it is important to ensure that they are retained in their positions amid the forthcoming shortage of nursing leaders (Tourangeau, 2003).

A systematic review was conducted to assess the state of knowledge of the predictors of job satisfaction for front line nurse managers (Lee & Cummings, in review). The results of this review show that span of control, decentralization, and organizational support play a significant role in predicting front line managers' job satisfaction. Managers who are empowered and have autonomy in their role are more satisfied. The leadership styles and practices of senior leaders (directors) influence organizational support for managers and the worklife and burnout levels of managers, which negatively affects their job satisfaction. Although the review of the literature revealed a connection between nurse managers' job satisfaction and their leaders, the influence of senior leadership on aspects of manager worklife can be explored further.

Transformational leadership is a style that could have a positive effect on managers' worklife. By understanding how specific dimensions of transformational leadership affect the worklife and burnout levels of managers, organizations can develop strategies to help reduce the stress and challenges that these leaders face and ultimately keep them satisfied with their jobs. The purpose of this research study was to explore the relationships between the dimensions of Kouzes and Posner's (2002) transformational leadership theory and the worklife and burnout of healthcare managers. The focus of this research was on identifying the specific differences between several leadership cohorts,

understanding the effect of each leadership practice on managers' worklife and burnout, and making recommendations for healthcare organizations.

Literature Review

Leadership and Managers

Leadership has multiple definitions and conceptualizations in the literature and research. Most definitions indicate that leadership is found in traits, behaviours, and practices of individuals and involves exchange between leaders and followers in a complex relationship. Transformational leadership differs from other styles of leadership in that the transformational leader works to inspire, collaborate, and involve employees to achieve goals. These leaders offer a purpose that transcends short-term goals, which inspires employees to follow the leader to the best of their ability. In comparison, more traditional transactional leadership styles use extrinsic motivators in a structured environment such as rewards for achieving objectives. The transactional leader has positional authority and simply asks the employee to complete a task without requiring that the employee collaborate or buy into organizational goals (Barbuto, 2005; Thyer, 2003).

The transformational style of leadership has shown to be effective in nursing, where a high degree of team building is required and where there is a complex interplay of relationships between various levels of management, staff nurses, and other healthcare disciplines (Bowles & Bowles, 2000; Cardin & McNeese-Smith, 2005; Krugman & Smith, 2003). Leadership has also had an impact on a wide range of nursing issues, including job satisfaction, productivity, organizational commitment, and health (Laschinger et al., 2004; Loke, 2001). Evidence points to the key role that nurse managers play in achieving quality nursing care and positive patient outcomes (Boyle,

2004; Sovie, 1994; Stordeur, Vandenberghe, & D'hoore, 2000; Wong & Cummings, 2007). Managers provide leadership, support, and direction to staff nurses, who are the direct providers of patient care. In fact, Boyle found that high managerial support and greater collaboration with staff nurses led to fewer adverse patient events and lower death rates. Managers also play an important role in staff retention, and the research suggested that increasing the number of front line managers improves staff retention as well as the quality of patient care (Cooke, 2002). In addition to the current nursing shortage, the pool of current and future leaders is declining (Tourangeau, 2003). Thus, it has become increasingly important to find ways to develop effective nursing leadership.

Leadership is practised at many levels throughout an organization. Therefore, strong leadership from senior leaders could facilitate the development of effective leadership for front line managers and others at various hierarchical levels. Enhancing and developing transformational leadership styles in managers will enable organizations to positively influence employee worklife and be successful in retaining staff and achieving quality patient care.

Burnout and Worklife

Burnout is defined as a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach, Shaufeli, & Leiter, 2001). It is defined by three dimensions: high burnout (exhaustion), high cynicism, and low performance. Most outcomes of burnout relate to job performance and health. In particular, burnout has been associated with absenteeism, intent to leave the job, turnover, organizational commitment, and job satisfaction. Health outcomes of burnout are most frequently seen in areas of mental health and the absence of energy for the emotional requirements to provide services (Leiter & Spence Laschinger, 2006). Although burnout occurs in many

occupational fields, research has found high levels of burnout in nursing (Laschinger, Finegan, Shamian, & Wilk, 2003; Leiter, 2005). In particular, positive relationships have been found between leadership styles, the quality of nursing work environments, and nurses' mental and physical health (Cummings, Hayduk, & Estabrooks, 2005). With this in mind, it becomes important to develop strategies to manage burnout by improving the work environment while continuing to maintain high quality standards of nursing care. Laschinger et al. reported that supportive work environments decrease emotional exhaustion, a key component of burnout.

Maslach and Leiter (1999) identified six areas of worklife that have consistent relationships to burnout: *workload*, *control*, *reward*, *community*, *fairness*, and *values*. Each of these aspects of worklife in turn influences other factors such as job satisfaction, organizational commitment, and retention of managers. Generally, if managers are unsatisfied with their worklife, there is greater potential for them to leave, so strategies to improve worklife may enhance manager retention. With evidence suggesting that social support for managers is a key factor that influences their job satisfaction, strategies that increase social support could positively influence specific aspects of worklife such as control, reward, and community (Lee & Cummings, in review). Organizations can develop positive leadership practices to enhance worklife for managers and employees by understanding the effect of leadership on worklife and thereby addressing issues of retention and job satisfaction of managers. Transformational leadership may be one way to positively influence the managerial worklife.

Kouzes and Posner's Leadership Theory

Kouzes and Posner (2002) advocated for strong leadership that uses a transformational style to achieve organizational success. Much of their research was

based on in-depth studies with large numbers of executives, organizational leaders, and those wanting to develop their leadership skills. Strong leadership can transform values into actions, visions into realities, and obstacles into innovations, and successful leadership creates a climate in which people turn challenges into success (Kouzes & Posner, 2002). The most effective managers employ a transformational leadership approach akin to Kouzes and Posner's model (Lim, 1997).

Kouzes and Posner (2002) discussed five practices that build and sustain positive leadership within an organization: *inspiring a shared vision*, *modeling the way*, *challenging the process*, *enabling others to act*, and *encouraging the heart*. These practices are based on relational leadership and emotional intelligence, and the focus is on taking care of people rather than focusing on tasks to the exclusion of the individual. A leader can inspire a shared vision by understanding the needs of followers, and together they can work to develop a vision, goals, and direction for the future. Modeling the way allows the leader to demonstrate leadership through action. For example, leaders model integrity when their actions are consistent with their words and values. Challenging the process is evident when the leader shows innovation and creativity in achieving goals. Enabling others to act encompasses building trust and collaboration to enable people to become a successful team. This leadership practice is particularly relevant for healthcare organizations because patient care is often provided through interdisciplinary teams. Finally, the leader encourages the heart by recognizing and appreciating people for their achievements and contributions. Kouzes and Posner's (2002) framework for transformational leadership served to frame this study (Figure 3).

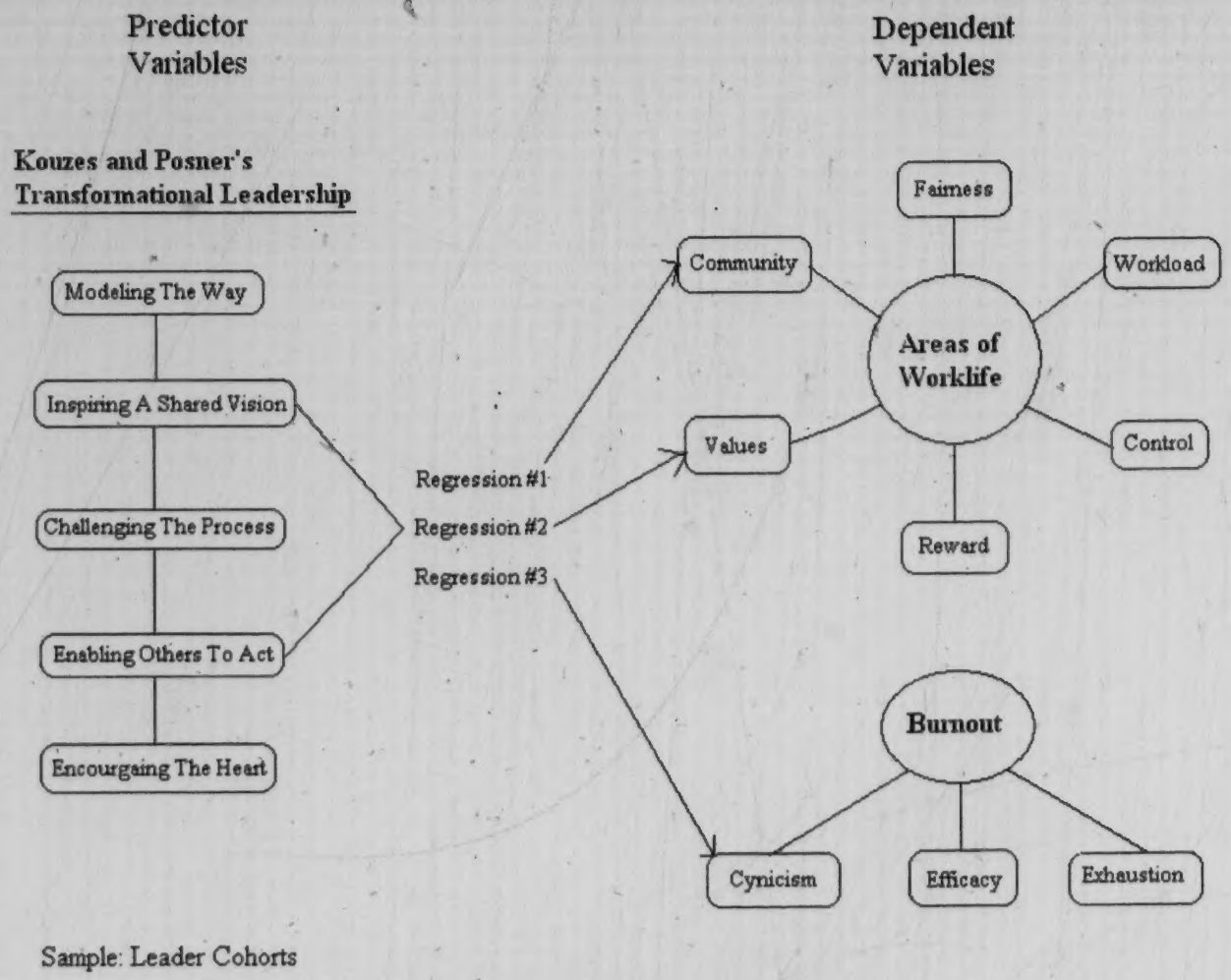

Figure 3. Hypothesized theoretical model.

Research Hypotheses

Based on this literature review, three study hypotheses guided this study: (a) that directors' leadership practices of *inspiring a shared vision* and *enabling others to act* significantly predict community reported by managers in the organization; (b) that directors' leadership practices of *inspiring a shared vision* and *enabling others to act* significantly predict a sense of congruence between the manager's values and those of the organization; and (c) that directors' leadership practices of *inspiring a shared vision* and *enabling others to act* significant predict less cynicism of managers. The leadership dimensions of inspiring a shared vision and enabling others act are practices that involve the senior leader (director) in engaging and interacting with a junior leader (manager). These leadership practices incorporate the idea of resonant (emotionally intelligent) leadership, which the research suggested has a positive effect on the coping mechanisms of nurses and leads to fewer negative effects on health and well-being in emotionally stressful situations (Cummings, 2004). Community, values, and cynicism were chosen as outcome variables that are affected by transformational leadership as directors set out to involve, support, and help their managers feel connected to their work.

Method

Design

A quantitative secondary analysis of previously collected data from the Worklife Improvement and Leadership Development (WILD) study (Cummings et al., in review) was conducted. The secondary data source consisted of managers from 17 cancer treatment facilities across Alberta operated by the Alberta Cancer Board (ACB).

Description of the WILD Study

Quantitative and qualitative data were collected to examine the outcome of a three-year (2004–2006) Leadership Development Initiative (LDI) within the provincial cancer agency aimed at strengthening a culture of learning and development to enhance leadership within the organization. The goal of the WILD study was to determine the impact of the LDI on the emotional health, well-being, and worklife of leaders and employees in the organization.

Data were collected in 2006 from 17 cancer treatment facilities across Alberta through the WILD Study. All 243 employees in defined leadership roles, grouped into five cohorts (directors, managers, leaders in operational roles, leaders in collaborative roles, and junior supervisors) were invited to participate in the study; 176 leaders (33 directors, 39 managers, 42 leaders in operational roles, 30 leaders in collaborative roles, and 32 junior supervisors) responded, for a 72.4% response rate. Pre-intervention baseline data were collected from staff and four of the five leader cohorts, with the exception of the directors, whose data were collected midway through the first LDI session. The WILD study also collected qualitative data through interviews and focus groups with participants from all leadership cohorts and staff in nonleadership roles.

Data from the WILD study were analyzed using SPSS and verified by the project research coordinator. Standard and comprehensive data editing and quality checks on the final survey data file were completed in consultation with the project coordinator before use by the research team. A record of documentation and a technical report documenting the quality-assurance procedures for the data were completed for the final survey data file.

Sample for Secondary Analysis

Only quantitative data from the leader cohort sample in the WILD study were used for secondary analysis in this study. First, an analysis was completed on a subsample of three senior leadership groups, for a total of 114 male and female leaders: 33 directors, 39 managers, and 42 leaders in operational roles. Further analysis was conducted on all five leadership cohorts (n=176). Leaders in operational roles were those in coordinator or clinical management positions who reported to managers. Leaders in collaborative roles were those in management positions in departments that supported leaders who were directly involved in patient care decisions.

Although the sample was not exclusively made up of nurses, many of these managers were nurses with a diploma, degree, or graduate-level education. The study demographics for the leadership groups are reported in Table 5. The following priori sample-size requirement was calculated for regression based on the work of Cohen (1987; Figure 4). The medium effect size was 0.13 (R^2), the number of independent variables was five (u), and the effect size index was 12.8 (L) at a power level of .80 and alpha of .05. A medium effect size was selected for secondary analysis based on the report from previous studies in the general research literature that the Leadership Practices Inventory (LPI) has a medium effect size range (Khoury, 2005; Xirasagar, Samuels, & Stoskopf, 2005; Zagorsek, Stough, & Jaklic, 2006).

The minimum sample size required for this calculation was 92. The 114 people used for this secondary analysis was sufficient to achieve appropriate testing power. Gender and sex roles, which refers to male or female characteristics, were nonsignificant as a predictor of leadership behaviour (Cummings et al., in progress); thus, they were not addressed in this study.

Table 5

Sample Demographics

Demographic	Junior supervisors (n=32)	Leaders in collaborative roles (n=30)	Leaders in operational roles (n=42)	Managers (n=39)	Directors (n=33)
Work Status:					
• Full Time	27	22	36	36	33
• Part Time	4	7	5	3	0
• Casual	0	0	0	0	0
• Not Reported	1	1	1	0	0
Time with Organization:	16	12	16	16	13
• 0 to 5 years	6	4	5	10	5
• 6 to 10 years	4	9	13	8	11
• 11 to 20 years	5	4	7	4	3
• 21 or more years	1	1	1	1	1
• Not reported					
Time in Department:					
• 0 to 5 years	16	16	16	18	17
• 6 to 10 years	7	2	6	9	3
• 11 to 20 years	4	7	11	7	9
• 21 or more years	4	3	7	4	2
• Not reported	1	2	2	1	1

(table continues)

Demographic	Junior supervisors (n=32)	Leaders in collaborative roles (n=30)	Leaders in operational roles (n=42)	Managers (n=39)	Directors (n=33)
Time in Profession:					
• 0 to 5 years	3	4	2	1	1
• 6 to 10	4	2	4	4	1
• 11 to 20 years	11	9	15	15	17
• 21 to 30 years	9	10	14	12	8
• 31 or more years	3	2	5	7	6
• Not reported	2	3	2	0	0
Gender:					
• Male	0	1	9	5	12
• Female	31	28	32	33	21
• Not reported	1	1	1	1	0
Age:					
• 25 to 35 years	5	5	5	4	0
• 36 to 45 years	8	5	12	13	9
• 46 to 55 years	11	14	9	12	12
• 56 or more years	5	1	9	6	10
• Not reported	3	5	7	4	2
Highest Education:					
• High School	6	0	7	0	0
• Certificate	5	3	7	2	0
• Diploma	10	2	9	9	2
• Baccalaureate	6	14	14	17	10
• Masters	1	7	2	7	10
• PhD	0	2	0	2	6
• Other	3	1	0	1	5
• Not reported	1	1	3	0	0

$$N = \frac{L(1-R^2)}{R^2} + u + 1 \qquad N = \frac{12.8(1-0.13)}{0.13} + 5 + 1 \qquad N = 91.7$$

Figure 4. Sample size calculation.

Measures

The Maslach Burnout Inventory (MBI) was used to collect data to measure burnout and the relationship between work, emotional health, and well-being (Maslach, Jackson, & Leiter, 1996). The MBI has been reported as valid and reliable for measuring burnout in nursing leaders (Tourangeau, Lemonde, Luba, Dakers, & Alksnis, 2003; Tourangeau & McGilton, 2004). The MBI consists of 22 questions with three subscales: *burnout*, *cynicism*, and *performance*. Of the three dimensions, burnout was the most widely reported and most thoroughly analyzed and reflects the levels of stress and emotional exhaustion. Cynicism is a way of coping with burnout by using cognitive distancing, which is a reaction to exhaustion. This positive relationship between cynicism and exhaustion was found consistently in research on burnout (Maslach, Schaufeli, & Leiter, 2001). Performance is a more complex concept that sometimes appears as a function of burnout, cynicism, or a combination of the two. Poor performance also arises more clearly from a lack of resources, whereas burnout and cynicism emerge from work overload or social conflict.

The Areas of Worklife Survey consists of six subscales: *workload*, *control*, *reward*, *community*, *fairness*, and *values*. Workload relates to the emotional exhaustion that occurs when employees lack time and support to recover from demanding work. Control points toward role conflict, role ambiguity, and autonomy: If workers have direction and control in their work, they will have lower incidence of burnout. Reward is

more than simply being recognized at work, but also involves the appropriateness of reward for tasks and the perceptions of reward that is equitable in comparison with other employees. This variable does not include pay compensation as an indicator of reward. Research on community focuses on social support from individual to organizational levels to manage burnout. Fairness measures the perception of equity for recognition, opportunities, and reward and is associated with building and sustaining positive relationships between leaders and employees. Values influence burnout when there is misalignment of priorities and direction between individuals and the organization. Aligned values can have strong psychological effects on the meaningfulness of work as well as on organizational commitment (Maslach & Leiter, 1999).

The LPI was used to collect data on the leadership behaviors of leaders in each cohort (Kouzes & Posner, 2002). The LPI is a 30-item tool used in multidisciplinary research that has been validated in health research (Tourangeau & McGilton, 2004). The reported alpha reliability scores for each leadership practice of *inspiring a shared vision*, *modeling the way*, *challenging the process*, *enabling others to act*, and *encouraging the heart* range from α=.71 to .85 (Kouzes & Posner, 2002), whereas Tourangeau and McGilton obtained scores of α=.46 to .84 for the pretest and α=.74 to .89 for the posttest. The LPI has established face and discriminant validity (Carless, 2001; Leong, 1995). Medium effect sizes were found when testing Kouzes and Posner's LPI on a variety of managerial dimensions, including gender and work satisfaction (Manning, 2002; Xirasagar et al., 2005). Psychometric analysis of this tool showed some redundancy in the items because they contributed little to the overall precision of the instrument. The LPI was also reported as most precise and reliable for respondents with low to medium leadership competence (Zagorsek et al., 2006). Although the five-factor versions of the

LPI have been used in several nursing studies, Tourangeau and McGilton suggested a three-factor solution with stronger psychometric properties than Kouzes and Posner's model has.

Reliability and Validity

The reliability and validity for secondary analysis were based in part on the reliability and validity of the results of the WILD study (Table 6). The Areas of Worklife Survey had subscale reliabilities ranging from α=.691 to .866. The LPI-Self had an overall reliability of α=.962 and subscale reliability ranging from α=.742 to .925. The LPI-Observer, which was used in this study, had an overall reliability of α=.983 and subscale reliability ranging from α=.908 to .957. The MBI had an overall reliability of α=.77 and subscales ranging from α=.644 to .867.

Data Analysis

The statistical analysis used multiple regression and SPSS 15.0 for Windows for data analysis. Multiple regression analysis determines whether a set of independent variables predict the dependent variable. The researcher conducted data analysis using the observer-reported leadership data and self-reported worklife and burnout data from the three and five leadership cohorts. The predictor variables were the mean scale scores of the five dimensions of transformational leadership from Kouzes and Posner's (2002) theory from the LPI-Observer. The mean scale scores for the three areas of the MBI—burnout, cynicism, and performance—and the six mean scale scores from the Areas of Worklife Survey were regressed separately on the predictor group of leadership practices.

Table 6

Areas of WorkLife Survey: Instrument Reliabilities

Subscale	Cronbach's alpha
Workload	0.817
Control	0.691
Reward	0.881
Community	0.866
Fairness	0.839
Values	0.772
Leadership Practices Inventory – Self	
Instrument	**Cronbach's alpha**
LPI-Self: All Variables	0.962
Subscale Reliabilities	
Challenging the process	0.764
Inspiring a shared vision	0.925
Enabling others to act	0.881
Modeling the way	0.742
Encouraging the heart	0.887
Leadership Practices Inventory – Observer	
Instrument	**Cronbach's alpha**
LPI-Self: All Variables	0.983
Subscale Reliabilities	
Challenging the process	0.908
Inspiring a shared vision	0.951
Enabling others to act	0.928
Modeling the way	0.930
Encouraging the heart	0.957
Maslach Burnout Inventory	
Instrument	**Cronbach's alpha**
MBI: All Variables	0.770
Subscale Reliabilities	
Emotional exhaustion/burnout	0.867
Cynicism	0.644
Performance/efficacy	0.792

Additional data analysis included a multivariate analysis of covariance (MANCOVA) in which the correlations among the five LPI variables ranged from α=.70 to .88. The MANCOVA used the LPI variables as the covariates, the cohort as the fixed factor, and the worklife variables and MBI variables as dependent variables in two separate MANCOVAs. The sample from the three leadership cohorts and all five leadership groups were analyzed with MANCOVA.

The three different hierarchical levels of management were separated using dummy coding to allow for comparison between manager groups. The number 2 was assigned to directors, 1 to managers, and 0 to leaders in operational roles who report to the managers. This hierarchical coding reflects the reporting structure of the leaders where leaders in operational roles report to managers, who in turn report to directors. Similar coding was used for the analysis of all five leadership groups. This hierarchical dummy coding assumes equal organizational distance between the managerial groups. The data were examined for extreme values and missing information. Using univariate statistics, the independent and dependent variables were assessed for distribution, measures of central tendency, and differences between the managerial cohorts. The demographics of each leadership cohort are reported in Table 5.

Ethics

The WILD study received ethics approval from the Health Research Ethics Board (HREB), and consent was obtained from all participants in this study. The study received expedited ethics approval from the ACB and the HREB at the University of Alberta because, under HREB guidelines, a secondary analysis may be deemed as having a minimal level of risk to the subjects. The principal investigator provided permission to use quantitative WILD study data for the secondary analysis. Anonymity and

confidentiality were maintained in the WILD study, the survey data contained no identifying information, and names were not linked to the collected data. The same anonymity and confidentiality were maintained during the secondary analysis of the data.

Results

Three Leadership Cohorts

The results of the three study hypotheses are as follows:

1. Directors' leadership practices of inspiring a shared vision and enabling others to act did not significantly predict community as reported by managers in the organization. Rather, the leadership practice of challenging the way had a significant relationship to high levels of community (p=.03), with the regression model significant at p=.001.
2. Directors' leadership practices of inspiring a shared vision and enabling others to act did not significantly predict a sense of congruence between the managers' values and those of the organization. The regression model was significant at p=.003; however, no significant relationships between the leadership dimensions and congruence with values were identified in this model.
3. Directors' leadership practices of *inspiring a shared vision* and *enabling others to act* did not significantly predict less reported cynicism in managers. The regression model was significant at p=.001; however, the only significant relationship identified was between *encouraging the heart* and less reported *cynicism*, p=.006.

Significant relationships between the leadership practice of *enabling others to act* and a high amount of control and positive perceptions of appropriate reward and fairness as

reported by leaders were found in the remaining regression models. Table 7 shows the results of the multiple regression analysis for both the three cohort sample and the five cohort sample.

Using MANCOVA, significant relationships were found between the leadership practices of *modeling the way* (p=.043) and *enabling others to act* (p<.01) with two aspects of manager worklife. The practice of modeling the way is significantly related to perceptions of appropriate reward (p=0.009), whereas enabling others to act is related to a high amount of control (p<0.01) and perceptions of fairness (p=.011). In pairwise comparisons, a significant difference in estimated marginal means was found between managers and directors in their amount of control (p=.019), with directors experiencing a greater degree of control in their job than managers do. A significant relationship was found between the leadership practice of *encouraging the heart* and levels of burnout (p=.039). The practice of encouraging the heart is related to less reported cynicism in leaders (p=.004). No significant differences between managerial groups were identified in pairwise comparison for levels of burnout. See Tables 8 through 12 for the results of the MANCOVA analysis.

All Leadership Cohorts

The same hypotheses were tested using multiple regression for all five leadership cohorts in the sample.

1. Leadership practices of *inspiring a shared vision* and *enabling others to act* by senior leaders did not significantly predict high levels of community in managers. *Enabling others to act* had a significant relationship to high levels of perceived community (p=.024), with the regression model significant at p=.001.

Table 7

Multiple Regression Analysis

	3 leadership cohorts				All leadership cohorts			
Dependent variable	R	Adjusted R squared	F	Significance	R	Adjusted R squared	F	Significance
Workload	.254	.011	1.19	.314	.284	.047	2.42	.029
Control	.479	.185	5.15	.000	.505	.228	9.37	.000
Rewards	.459	.165	4.61	.000	.506	.229	9.44	.000
Community	.436	.143	4.06	.001	.438	.163	6.53	.000
Fairness	.512	.219	6.14	.000	.549	.276	11.8	.000
Values	.415	.125	3.61	.003	.407	.135	5.45	.000
Burnout	.232	.001	.989	.437	.278	.044	2.30	.037
Performance	.329	.057	2.10	.059	.222	.015	1.42	.210
Cynicism	.434	.142	4.03	.001	.417	.144	5.76	.000

- Predictor Variables: 5 LPI Observer Variables and Cohort

Table 8

Mean Squared and MANCOVA F Values for Worklife Variables: Three Leadership Cohorts

	Workload		Control		Rewards		Community		Fairness		Values	
Independent variable	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F
Cohort	.436	.636	.887	2.87	.151	.294	.341	.503	.480	1.08	.322	.961
Covariates												
Inspiring a shared vision	.486	.710	.201	.653	.023	.044	.168	.247	.068	.155	.013	.038
Modeling the way	.509	.743	.028	.091	3.62	**7.06***	1.76	2.60	.008	.018	.038	.114
Challenging the process	.967	1.41	.019	.061	1.512	2.95	3.23	**4.77***	.019	.042	.266	.795
Enabling others to act	.507	.739	4.71	**15.2***	.009	.017	.197	.291	2.95	**6.69***	.170	.509
Encouraging the heart	.053	.077	1.62	**5.26***	.650	1.26	.053	.079	.051	.117	.397	1.18

*** Significant at p<0.05**

Table 9

Mean Squared and MANCOVA F Values for Worklife Dependent Variables: All Leadership Cohorts

	Workload		Control		Rewards		Community		Fairness		Values	
Independent variable	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F
Cohort	1.21	1.78	1.40	**3.54***	.180	.305	.533	.738	.939	1.92	.819	1.99
Covariates												
Inspiring a shared vision	.045	.065	.185	.467	.047	.079	.107	.148	.267	.549	.039	.096
Modeling the way	.083	.122	.463	1.17	3.65	**6.17***	.046	.064	.087	.178	.003	.007
Challenging the process	.452	.661	.586	1.48	1.31	2.21	.101	.140	.033	.067	.312	.760
Enabling others to act	1.53	2.23	11.5	**29.1***	.000	.000	2.61	3.61	4.43	**9.10***	.037	.091
Encouraging the heart	.454	.663	1.20	3.03	2.49	**4.21***	.006	.008	.035	.071	.329	.801

*** Significant at p<0.05**

Table 10

Mean Squared and MANCOVA F Values for MBI Variables

	3 leadership cohorts						All leadership cohorts					
	Burnout		**Performance**		**Cynicism**		**Burnout**		**Performance**		**Cynicism**	
Independent variable	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F	Mean square	F
Cohort	2.37	1.26	1.16	1.43	1.16	1.05	1.74	.846	.668	.652	2.20	1.52
Covariates Inspiring a shared vision	4.65	2.47	.238	.293	2.31	2.09	.435	.211	.004	.004	2.10	1.45
Modeling the way	.651	.346	.049	.060	.391	.354	1.42	.694	2.19	2.13	.585	.404
Challenging the process	.089	.047	1.45	1.78	1.37	1.24	1.75	.852	.146	.143	.623	.430
Enabling others to act	1.40	.745	.028	.034	2.02	1.82	.779	.379	.034	.033	.197	.136
Encouraging the heart	2.79	1.48	1.40	1.73	9.42	**8.53***	1.93	.943	.094	.091	.775	.536

*** Significant at p<0.05**

Table 11

MANCOVA Pairwise Comparison for All Leadership Cohorts

Worklife variable	Leadership cohorts	Significance
Workload	Directors and leaders in collaborative roles	.008
	Directors and junior supervisors	.049
Control	Directors and managers	.024
	Directors and leaders in collaborative roles	.001
	Directors and junior supervisors	.004
	Leaders in operational roles and leaders in collaborative roles	.032
Fairness	Directors and leaders in collaborative roles	.022
	Directors and junior supervisors	.050
	Managers and leaders in collaborative roles	.024
Values	Managers and junior supervisors	.004
	Leaders in operational roles and junior supervisors	.031
Cynicism	Leaders in operational roles and leaders collaborative roles	.041
	Leaders in operational roles and junior supervisors	.049

Table 12

Group Means for Leadership Cohorts

Variables	Directors	Managers	Leaders in operational roles	Leaders in collaborative roles	Junior supervisors
Inspiring a shared vision	6.97	6.93	6.37	6.24	6.68
Modeling the way	7.79	7.40	6.02	6.17	6.32
Challenging the process	7.45	7.32	6.16	6.20	6.45
Enabling others to act	7.46	8.07	6.98	6.94	7.39
Encouraging the heart	6.58	6.58	6.03	5.78	6.29
Workload	2.52	2.62	2.68	3.03	2.85

(table continues)

Variables	Directors	Managers	Leaders in operational roles	Leaders in collaborative roles	Junior supervisors
Control	4.09	3.88	3.80	3.53	3.61
Reward	3.52	3.24	3.38	3.38	3.24
Community	3.51	3.76	3.50	3.16	3.43
Fairness	3.16	3.19	2.86	2.63	2.79
Values	3.79	3.97	3.72	3.61	3.37
Burnout	3.35	3.76	3.30	3.32	3.72
Performance	2.33	2.16	2.19	2.64	2.21
Cynicism	2.19	2.49	2.44	3.07	3.05

2. Leadership practices of *inspiring a shared vision* and *enabling others to act* by senior leaders did not significantly predict a sense of congruence between organizational and employee values. The regression model was significant at $p<.01$; however, no significant relationships between the leadership practices and congruence with values were identified in this model. A significant relationship was found between the managerial cohort and congruence with values ($p=.015$). A post-hoc analysis of variance (ANOVA) found a significant difference between managers and junior supervisors in their reported congruence with values ($p=.016$), and managers reported a higher level of value congruence than did supervisors.
3. Leadership practices of *inspiring a shared vision* and *enabling others to act* by senior leaders did not significantly predict less reported cynicism in managers. The regression model was significant at $p<.01$; however, no significant relationships between leadership practices and reported levels of *cynicism* were identified in this model.

Significant relationships were found between the *level of workload*, *amount of control*, perceptions of appropriate *reward*, perceived *fairness*, and levels of *burnout* reported by managers in the remaining regression models (Table 3).

Using MANCOVA, significant relationships were found between the practice of *enabling others to act* ($p<.01$) and the manager cohort ($p=.26$; Tables 5 and 6). Enabling others to act is significantly related to higher reported control ($p<.01$) and perceived fairness ($p=.003$) between directors and lower-level cohorts. A significant difference in the manager cohort was found in the amount of control that they have in their worklife ($p=.005$). Pairwise comparisons among the leadership groups for the areas of worklife (Table 7) showed significant differences in particular between directors and lower levels of management in their reported ratings for the areas of worklife. Directors generally reported the highest quality of worklife (Table 8). Using MANCOVA, there were no significant relationships within any of the leadership cohorts between leadership practices and levels of burnout, with the exception of *encouraging the heart* and less reported *cynicism* ($p<.05$), in that leaders in operational roles had less reported cynicism than did leaders in collaborative roles and junior supervisors.

Discussion

Transformational Leadership

Although the specific hypotheses were not supported, this study did uncover several other relationships between the leadership practices of senior leaders and the worklife of managers, leaders in operational roles, and junior supervisors. The results suggest that the leadership practices have more impact on the worklife of the front line leadership groups, which is evidenced by the increase in the number of significant relationships when the two lower-level cohorts were added to the sample. With regard to

the organizational structure, those in front line leadership positions tend to focus more on direct patient-care duties and are subject to a demanding workload in dealing with the needs of both staff nurses and upper-level managers. With transformational leadership practices significantly related to areas of worklife and levels of burnout, this indicates that healthcare organizations can develop strategies to utilize this leadership style to positively influence managerial life. A positive, supportive relationship between managers and nurses improves staff-nurse retention (Martin, 2004). Thus, developing similar positive relationships between senior leaders and managers through transformational practices may in turn help to retain managers. The findings of this study support the idea that transformational leadership is important when there is a complex interplay of relationships between various levels of management, staff nurses, and other healthcare disciplines (Bowles & Bowles, 2000; Cardin & McNeese-Smith, 2005; Krugman & Smith, 2003).

Kouzes and Posner's Leadership Dimensions

The practice of *inspiring a shared vision* is not significantly related to the areas of worklife or level of burnout that managers experience, as hypothesized in this study. Inspiring a shared vision involves motivating individuals to achieve organizational goals, but may not directly provide tangible guidance for leaders on how to achieve these goals. Inspiring a shared vision focuses on the larger picture in which the leader presents a broad view of organizational goals. It was expected that this would lead to an increased sense of community, higher congruence with values, and less reported cynicism; however, this leadership dimension may have less direct influence on managers' day-to-day tasks, which could explain why this practice is not significantly related to the level of managers' burnout.

Modeling the way by senior leaders is significantly related to the perception of the appropriateness of rewards by managers. Leaders are responsible for demonstrating to others how to achieve organizational goals and values and, accordingly, should recognize others who do the same. Bass and Steidlmeier (1999) reported that employees still have a strong interest in being rewarded despite being asked by transformational leaders to be less conscious of their own interests for the sake of achieving organizational goals. Managers may feel a sense of accomplishment in achieving organizational goals; however, they still want to be appropriately rewarded and compensated by their directors, which can improve job satisfaction and the retention of managers (Bass & Steidlmeier, 1999). Nursing leaders are vital in building organizational culture (Kane-Urrabazzo, 2006). The practice of modeling the way helps to build a sense of community and strong culture by demonstrating congruence with organizational values, which encourages employees to follow suit. However, in this study an increased sense of community is not significantly related to the practice of modeling the way. This may be a result of the similarities between the leadership groups in their sense of community. Because modeling the way involves managers' being clear about the values for which they stand, this leadership practice may have a stronger impact on staff nurses than on other managers, especially if their fellow managers already share similar beliefs and behaviours.

The practice of *challenging the process* encompasses taking risks, seeking opportunities, and experimenting to find different ways to accomplish goals. This leadership practice is significantly related to managers' sense of community experienced because of the increased autonomy and empowerment that they have in looking for different ways to accomplish tasks. Organizational culture plays a strong role in the

ability of leaders to bring about changes in practice (Rycroft-Malone et al., 2002). Thus, an organizational culture in which directors support innovative ways of accomplishing tasks could improve the sense of community by allowing managers and junior leaders to utilize their creativity and problem-solving skills in addition to building a team approach in which the leader is able to utilize the strengths of each employee.

The practice of *enabling others to act* is not significantly related to the level of community, congruence with values, and level of cynicism experienced by any of the leadership cohorts, as expected in the research hypothesis. This may be because this leadership dimension has less to do with shaping organizational norms and more to do with the actual process of achieving objectives. Enabling others to act is significantly related to a high level of control for the entire leadership sample, and the directors' reported level of control is significantly related to perceived fairness reported by junior supervisors. This is consistent with the idea that the leader does not provide direct instruction, but instead acts as a guide to employees (Kouzes & Posner, 2002). Leaders give away their own power and allow staff to take initiative in utilizing their skills and knowledge in an effort to empower employees and provide them with the autonomy to decide how they will accomplish tasks. Managerial span of control, autonomy, and empowerment are related to job satisfaction, which suggests that this leadership dimension could have a strong impact on retaining nurse managers and improving their effectiveness (Doran et al., 2004; Laschinger & Wong, 2007; Lee & Cummings, in review). Healthcare organizations should consider empowering managers to improve areas of manager worklife. Enabling others to act is not significantly related to levels of cynicism, higher levels of performance, and less burnout as reported by the managers. This may indicate that other factors influence burnout that were not examined in this

study, such as personal or organizational characteristics. With regard to perceived fairness, it may be more equitable for managers to have their own autonomy and empowerment in their job rather than having the directors and senior leaders hold the majority of power as in a transactional leadership style. Perceptions of fairness result from the actions of leadership, which include how leaders let their staff work (Maslach & Leiter, 1999).

Finally, the practice of *encouraging the heart* allows workers to live up to their own positive expectations and recognizes them for doing so (Kouzes & Posner, 2002). This leadership practice is significantly related to the amount of control when higher-level leaders such as directors and managers have greater control than leaders in collaborative roles because they are able to decide how they will be accountable for living up to their own expectations Martin (2004) found this to be important for staff retention and organizational commitment. Furthermore, living up to personal and organizational values relates to staff's ability and desire to carry out their jobs (cynicism). The relationship between encouraging the heart and appropriate rewards is perhaps the most clear because this leadership practice revolves around promoting intrinsic reward and recognition for front line leaders. Appropriate rewards are important, because it is clear that extrinsic rewards are a vital aspect of both manager and staff-nurse worklife (Ivancevich, Konopaske, & Matteson, 2005, pp. 205-243). The appropriate recognition of a manager for positive accomplishments combined with extrinsic reward may enable organizations to positively influence job satisfaction and the retention of nursing leaders. Although extrinsic rewards such as financial compensation were not addressed in this study, it may be valuable in future research to determine how the combination of intrinsic and extrinsic rewards affects the worklife of managers.

Differences Between Managerial Cohorts

Leaders differed by cohort in their congruence between organizational and personal values and the amount of reported control over their work. Managers and junior supervisors differed in their congruence with organizational values possibly because of their relatively junior organizational positions. At lower levels, junior supervisors may share values that are more similar to those of staff nurses rather than senior management. However, this difference in value congruence was not seen between directors and managers. Span of control, autonomy, and empowerment may be the differentiating factors for the amount of control reported because the directors reported higher workload, level of control, and perceived fairness than did leaders in collaborative roles. Again, although managers and directors would be assumed to have the highest level of autonomy and control, there were no other significant differences found between these cohorts. Enabling others to act is notably different between upper- and lower-level managers in examining leadership practices through MANCOVA. Upper managers utilized this practice more often than lower-level managers, likely because of the differences in role expectations. This suggests that leaders utilize more transformational qualities as they move through managerial levels and may use a more transactional (task-oriented) style at lower levels. Pairwise comparisons highlighted that the directors' ratings were higher in all areas of worklife compared with those of lower-level management groups. This was expected because senior-level leaders have the greatest amount of control over their own worklife.

Although it is evident that there are differences in leadership practices between upper- and lower-level managerial groups, further research may help to determine which specific factors contribute to differences in leadership, areas of worklife, and levels of

burnout. It is important to examine other factors such as age and experience because higher-level managers are generally older and more experienced, which enables them to deal with leadership challenges more effectively. Research has shown that older leaders are more effective and have more managerial competencies (Cummings et al., in progress).

Influence on Worklife and Burnout

The amount of control and appropriate rewards are the areas of worklife most affected by transformational leadership practices according to the findings of this study. Because the other areas of worklife had few significant relationships to transformational practices, it is possible that the aspects of control and rewards are key concepts that have the most impact for leaders. High levels of control and appropriate reward may be central enough factors to offset the negative impact of other worklife dimensions. Managing the stressors that leaders face will promote mental and physical health, which will have a positive effect on their levels of burnout (Health Canada, 2000). Kluska, Spence Laschinger, and Kerr (2004) found that structural empowerment has a significant impact on effort-reward imbalance in that being empowered helps to reduce the perception of inadequate reward for nurses' efforts in accomplishing tasks. Thus, if managers are unhappy with their workload, appropriate reward or empowerment may adequately compensate for their dissatisfaction and reduce their stress levels. Further research to identify the areas of worklife that are most important to managers at various organizational levels is needed because the factors that are important to one cohort may be different for another.

The level of reported cynicism is the only factor significantly related to leadership practices in both the three and five cohort leadership sample, which suggests that

transformational leadership has an important influence on a managers' commitment to their jobs. Levels of burnout and higher performance were significantly related to transformational practices only in the entire leadership sample. Leadership provided to lower-level leaders may play a more important role because they deal with demanding day-to-day management activities and are at the highest risk for burnout. The impact of a transformational style of leadership becomes more important for leaders who are in closer proximity to the staff nurse workforce. Further research should compare the differences between how leadership is both structured and implemented to develop a better understanding of the role of organizational structure in the effects of burnout levels and areas of worklife. Martin (2004) found a relationship between reward, performance feedback, burnout, and retention and also identified the importance of using a coaching style of leadership, which is similar to a transformational style. Accordingly, the results from Martin's study show that transformational leadership may positively influence managers' worklife and levels of burnout.

Limitations

One issue that may have affected our results is that no direct reporting relationship between leadership groups was identified in the data. Thus, the survey responses of each group do not account for variations and interpersonal dynamics between individual managers and the leaders to whom they report. The data also did not capture how each leadership role is implemented. Consequently, one director may allow a junior supervisor more autonomy to carry out his or her job, whereas another leader may employ a more transactional style, which makes it difficult to identify the degree to which leaders in individual cohorts in this study use transformational leadership. The development of leadership competencies is a slow process that often centres on technical

fields rather than relational skills (Baker, 2003). Leaders and the healthcare facilities where they work may be at varying stages in using transformational and transactional leadership. Furthermore, although leadership styles have traditionally been transactional, leadership style is not necessarily dichotomous, and other styles of leadership may be used in addition to transformational or transactional practices. In addition, the individual uniqueness and personality traits of leaders were not examined in this study. Finally, the sample was not made up exclusively of nurses and did not account for variations in education, training, or managerial and leadership preparation.

The generalizability of the findings of this study may be limited because of the lack of probability sampling for this study. Another limitation is that the researcher was not involved in sampling or data collection because this was a secondary analysis, and the data were not originally gathered to answer the research question in this study. Cultural issues in relation to leadership were also not addressed in this research. Finally, the findings of this study are limited to the treatment facilities of a single healthcare agency.

Recommendations

The results of this study have several implications for healthcare organizations and nursing leadership. First, transformational leadership practices are predictors of aspects of manager worklife and levels of burnout. The practice that has the most influence is *enabling others to act*, which indicates that directors who use transformational leadership can empower managers and junior leaders to take initiative and ownership of their work to accomplish organizational goals. Increasing the autonomy and amount of control, particularly for lower-level managers, may help to improve their effectiveness as well as their perception of overall worklife and level of burnout.

Second, the results indicate that a high amount of control and appropriate reward are the most important aspects of worklife for managers. Transformational leadership could address both factors by having directors empower their managers and through enhancing intrinsic reward by helping junior leaders to take pride in contributing to organizational goals. In combination with appropriate extrinsic rewards, transformational leadership can positively address these aspects of worklife, which may in turn have a positive impact on managers' job satisfaction and, ultimately, their retention and recruitment.

Third, transformational leadership practices of senior leaders have the greatest impact on the worklife of lower-level managers, who are subject to demanding and stressful roles; therefore, healthcare organizations should implement strategies to build a stronger organizational culture by employing directors who use a transformational leadership style to positively affect all leaders' sense of community and congruence with values. This would help with succession planning to develop and strengthen future leadership because these junior leaders could become immersed in transformational practices that prepare them to be more effective as they progress to higher management positions.

Fourth, future research should explore the differences between managerial groups in the areas of worklife and levels of burnout. The factors that are important to one group of managers may be different for another. Although each leadership practice is equally important (Kouzes & Posner, 2002), determining the most important aspect of worklife for each cohort may allow leaders to use specific transformational leadership practices to positively address the needs of a specific leadership group. Research into personality traits and characteristics may also help to determine whether transformational leadership

develops with experience or age and lead to the development of educational interventions to build the transformational qualities of healthcare leaders.

Conclusion

Leadership is invaluable in helping to promote quality nursing care and positive patient outcomes. Because managers are placed in demanding and stressful roles, the results of this study suggest that senior leaders' transformational leadership practices play an important role in positively influencing the worklife and burnout levels of managers. This leadership style can empower managers to accomplish organizational goals and build a strong, supportive organizational culture. Developing strategies using transformational practices to address worklife and burnout may enable organizations to improve job satisfaction and retention and recruitment of managers, which will ultimately improve patient care. Utilizing a transformational style of leadership will help healthcare organizations to strengthen and develop stronger healthcare leadership for the future.

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